

Remarks/Arguments

As shown in Figure 4 of the present application, whenever a document 404 is going to be included into a textual database for access on the internet, a semantic binder is automatically added off line to the textual index for the document to associate words such as “video player” in the document 404 with one or more semantic nodes (here “multimedia”) which are defined in a semantic taxonomy 400. When a search is performed on a video player, a search application looks through a semantic dictionary (which contains a table mapping queries to nodes on the semantic taxonomy) to see whether any corresponding semantic node can be applied to the searchers keyword query. If a match is found, the search application automatically transforms the users query into an expanded query which contains both the “original keyword query term” OR “semantic node term” so that the textual database is interrogated not only for documents that contain the term “video player” as does document 412, but also for documents that are linked to the term “multimedia”. As a result, relevant documents 408 and 410 will be identified even though they do not contain the keyword “video player” used in users query but are returned because those documents are linked by the semantic binder to the term “multimedia”.

Claim Rejections under 35 USC 102

Claims 1 to 16 were rejected under 35 USC 102(e) as being anticipated by Omoigui (USPAP 2003/0126136).

In rejecting the claims in the application, the Examiner cites various paragraphs in the Omoigui publication. In his reading of these paragraphs, applicants attorney did not find that they describe a search system that automatically attaches a semantic node to the textual indexes of documents and to a users original query so that relevant documents can be found in the database using a simple expanded database query even though those documents do not contain one or more keyword terms in the original users query. Most recently in commenting about pages 13 and 14 of applicants last amendment (which argue for allowance of claims 1, 2, 9 and 10), the Examiner cites two paragraphs (paragraphs 249 and 273). The Examiner says that these paragraphs teach that semantic queries are keyword based queries. Applicants attorney did not find this teaching in either of the cited two sections. In fact, paragraph 273 defines Semantic Queries as queries that approach natural language, and distinguishes them from keyword queries stating that semantic queries are much more powerful than simple keyword based queries in that the semantic queries are context and time sensitive and incorporate meaning or semantics. Thus the semantic queries of the Omoigui reference do not include the simple keyword based queries used in the present application. Furthermore, the system of the present application does not require the natural language parser defined in paragraph 249 since there is no need to translate natural language queries into structured semantic information queries when simple keyword based queries are used.

All the claims in the present application are limited to use of keyword based queries which do not fall within the purview of the definition of semantic queries set forth in paragraph 273 or require the use of a parser as defined in paragraph 249. Independent claims 1, 9 and 17 all call for attaching a semantic node term

applicable to keyword terms used in a set of documents and to modify the users keyword query linked by the semantic node term applicable to the users keyword query term. Nothing in paragraphs 249 or 273 teach anything about providing such enhanced queries or modifying the textual indexes of the documents in the database.

Further, the Examiner cites paragraphs 510, 74 and 217 of the Omoigui reference against claims 1 and 9 as teaching use of such enhanced queries. Applicants attorney did not find such a teaching in these paragraphs. Paragraph 510 deals with publishing and sharing of Agents. There is nothing in paragraph 510 about automatically modifying a users keyword query by adding a semantic node to expand a users search. Paragraph 74, lines 14 to 17 deals with the use of Agents with other applications. There is no mention in these lines about automatically modifying a users keyword query by adding a related semantic node. Paragraph 217, lines 24 to 27, mentions that the user has semantic means of navigating. There is no mention in the paragraph on automatically modifying a users keyword query by addition of a related semantic node term. In fact, there is no mention of keyword queries at all in the above sections cited by the Examiner. Further as pointed out above, the definition in paragraph 273 of Semantic Queries used in Omoigui clearly distinguishes such queries from “keyword queries” claimed in claims 1 and 9. Therefore, claims 1, 9 and 17 distinguish from the Omoigui since there is no mention in paragraphs 510, 74 and/or 217 of keyword queries let alone automatic modification of a users keyword query by addition of a semantic node term as claimed in those claims. Claim 17 further distinguishes over the prior art in that it calls for using a semantic binder to attach a semantic node term to textual indexes of a document.

The dependent claims further distinguish over the prior art.

In rejecting claims 2 and 10, the Examiner cites paragraphs 466 and 217 of Omoigui. Paragraph 466 does not mention keyword queries. Further, it specifically calls for user participation and is therefore not automatic. It calls for a user to select an object to “link to” and in linking to, “browsing and modifying and add or remove.” As pointed out above, the cited section of paragraph 217 does not discuss keyword queries. Therefore, neither of the paragraphs of Omoigui cited against claims 2 and 10 teaches providing an enhanced search query term that automatically includes both “the users keyword search query OR the semantic node term” as claimed in claims 2 and 10. Claims 2, 10 and 18 depend from claims 1, 9 and 17, respectively. Therefore, claims 2, 10 and 18 distinguish from the prior art for the reasons given above for claims 1 and 9 in addition to the reasons given in this paragraph.

In rejecting claims 3 and 11, the Examiner cites paragraph 638 of Omoigui. Paragraph 638 deals with the Server Side Semantic Query Processor (SQP) of Omoigui. SQP responds to semantic queries from clients. As pointed out above, semantic queries are distinguished from keyword queries by definition in paragraph 278, lines 3 to 5. Claims 3 and 11 call for a dictionary that defines keyword query terms in user queries in accordance with semantic nodes not with a processor for handling semantic queries. Therefore, claims 3 and 11 do not read on paragraph 638. In addition, claims 3 and 11 depend from claims 2 and 10. Therefore, claims 3 and 11 distinguish from the Omoigui patent for the reasons given above for claims 1 and 9 and claims 2 and 10 in addition to the reasons given in this paragraph.

With respect to claims 4, and 12, the Examiner cites paragraph 1319 of Omoigui as disclosing a semantic dictionary builder. Claims 4 and 12 call for increasing keyword terms in a semantic dictionary and by adding them with one or more semantic nodes. Paragraph 1319 deals with adding Agents to an Agent list. There is no mention of keyword terms or examining a system log for the purpose of adding such terms to a semantic node of a keyword dictionary. Therefore, paragraph 1319 does not teach a semantic dictionary builder that adds keyword terms and associates them with semantic node as claimed in claims 4 and 12. Claims 4 and 12 depend from claims 3 and 11, respectively. Therefore, claims 4 and 12 are distinguishable from the Omoigui reference for the reasons given for claims 1,2 , 3, 9, 10 and 11 in addition to the reasons given in this paragraph.

The Examiner cites paragraphs 1319 and 1112 of Omoigui against claims 5 and 13. Neither reference discusses using enhanced queries to place keyword query terms in order of the number of times that they are used to shorten table lookup times, as claimed in claims 5 and 13. Claims 5 and 13 depend from claim 4.

For the reasons given above, claims 1, 2, 4, 5, 9, 10, 12 and 13 all distinguish from the prior art. The other dependent claims depend from either claims 1 and 9 through other depended claims and therefore distinguish over the prior art for the same reasons as those given for claims 1 and 9 and those other dependent claims. They also contain further limitations that also distinguish them from the prior art.

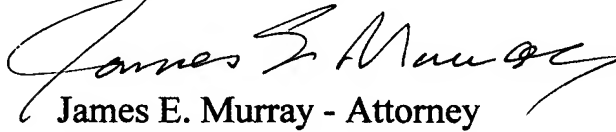
The structures of the Omoigui reference and the present invention serve different purposes. The Omoigui reference provides for a system for responding to semantic queries. As opposed to this, the present application provides for enhancement of a users traditional keyword query for the internet by addition of one or more other related keyword query terms. What appears to the applicants' attorney is that the Examiner went through the Omoigui reference and selected portions of the Omoigui which he considered applicable to the present application. However as discussed in detail above, the cited sections do not anticipate applicants' claims involving enhancement for accessing the internet in the traditional manner but relate to a semantic system to obtain desired references. The disparity of the purposes of the teaching of the present application and Omoigui make it clear that these sections differ both in content and purpose from the language and intent of the claims in the present application.

Rejection under 35 USC 101

Claims 9 to 16 have been rejected as being directed to nonstatutory subject matter. The referred to claims call for a computer program on a computer usable medium. This is a useful machine or article of manufacture and therefore constitutes statutory subject matter under 35 USC 101.

For the above reasons, it is respectfully submitted that all claims are allowable, and therefore it is requested that the application be reconsidered, allowed and passed to issue.

RESPECTFULLY SUBMITTED,


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